

REMARKS

1. The Examiner has required a restriction as between Group I, Claims 1-25, drawn to an interface between a driving member and a driven member and to a method of interfacing the driving member with a driven member, a coupling, and Group II, Claims 26-29, drawn to a method of manufacturing an axle pinion gear. Applicants elected Group I with traverse over the telephone and affirm the election. Claims 26-29 have been cancelled and new Claims 30-33 have been added.
2. The Examiner has objected to the drawings under 37 C.F.R. 1.84 (p)(4) because of inconsistent use of numerals in designating the components. The Examiner also objected to the drawings under 37 C.F.R. 1.83(a) because the drawings did not show the portion of the polygonal length of the driving member 38 being twisted (per at least Claim 1). New Fig. 10 has been prepared to show the internal portions of Fig. 3, numeral 40 and is attached in Appendix A. Fig. 5 has been amended per the Examiner's suggestions. No new matter was added in making these changes. The Examiner is requested to enter these changes.
3. The Examiner has objected to the specification because of an informality in the text, the references and description relating to the numeral "32." An amended paragraph has been entered correcting the use of the numeral "32." No new matter has been entered in amending the text. In addition, the paragraph with the description of Fig. 3 has been amended to add the text of new Fig. 10, per the Examiner's objection to the drawings mentioned above. No new matter has been added in amending the text.
4. The Examiner has objected to the claims because the "driven member" in Claim 16 should read "shaft," and in Claim 19, the limitation "the driven member is a" should be "the." The Examiner is thanked for his courtesy in pointing out these typographical mistakes. These corrections have been made by amending in the present Amendment, and Claim 19 has also been amended to make the grammar consistent.
5. The Examiner has rejected Claims 3, 16, and 22 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter the applicant regards as his invention. The Examiner states that in each of these claims, it

is unclear what the limitation “a male polygonal length” in line 2 refers to in Claim 1, 14 or 20, respectively.

Applicant traverses the rejections. Claims 1 and 20 claim a driving member having a polygonal length and a driven member comprising a matching polygonal length. Dependent Claims 3 and 22 then state that the driven member comprises a male polygonal length. It is therefore clear that the “matching polygonal length” is a male polygonal length. Nevertheless, without limiting or narrowing the claims, Claims 3 and 22 have been amended to make it clear that the polygonal length is male. The amendment made in the paragraph above to Claim 16 corrects any possible deficiency in Claim 16.

6. The Examiner has rejected Claims 1-3, 5-7, 9-16, 18, 20-22 and 25 under 35 U.S.C. § 102(b) as being anticipated by German patent 3,511,534. The Examiner states that, regarding Claim 1, the German patent discloses (Fig. 2) an interface comprising a driving member and a driven member. The driving member has a polygonal length with at least one surface selected from the group consisting of concave surfaces, convex surfaces, and straight surfaces, and the driving member is twisted along an axis of the polygonal length. Applicants have amended Claims 1, 9, 14 and 20 to make clearer the distinctions between the present application and the German patent.

7. The Examiner has also rejected Claims 1 and 4 under 35 U.S.C. § 102(b) as being anticipated by U.S. Pat. No. RE 34,612 to Walter Bender et al. (“Bender”). The Examiner is believed to state that Bender discloses all the limitations of Claims 1 and 4. However, there are references to the German patent on page 9, in the portion of the Office Action relating to Bender. Applicants assume these are typographical mistakes, and that the Examiner meant to refer to Bender alone.

Claim 1 of the present application claims an interface between a driving member having a polygonal length and a driven member, wherein a portion of one of the polygonal lengths is twisted along an axis of the length. Bender describes a shaft having a twist, but, as shown clearly in Fig. 4 of Bender, the twist does not occur at the interface, i.e., where the driving member or shaft interfaces with the driven member. In Bender, the twist occurs completely outside the interface zone where Bender’s shaft 60 interfaces with bracket 66. Therefore, in Bender, there is no “interface” that has the limitations required by Claims 1 and 4. Accordingly,

Bender does not describe or suggest the limitations of independent Claim 1 or dependent Claim 4, and the Examiner is respectfully requested to withdraw the rejection 35 U.S.C. § 102(b) over Bender.

8. The Examiner has also rejected Claims 8, 19, and 24 under 35 U.S.C. § 103(a) as being unpatentable over German patent 3,511,813 in view of U.S. Pat. No. 5,899,813 to Arthur Bunce (“Bunce”). Page 10 of the rejection refers to Dymerski as well as Bunce, but it is believed that the Examiner meant to refer to Bunce, since the portion cited, col. 2, lines 56-61, in Bunce is relevant, while the same passage in Dymerski does not seem to be related to the present rejection. If the Applicants are in error in referring to Bunce, the Examiner is requested to please let the Applicants know.

Applicants traverse the rejection. As the Examiner admits, the German patent does not refer to a concave male polygonal length. The passage cited in Bunce, Col. 2, lines 56-65, states:

Localized stress areas, which are created when certain sections of a periphery of a joint are not utilized during a full rotation of a torque application, are eliminated in the present invention because the joint design employs a convex polygon shape as opposed to a spline or a concave polygon design.

Thus, Bunce teaches *against* concave polygon design. The prior art must be considered in its entirety, including portions that teach away from the claims. M.P.E.P. 2141.02 at 2100-122. In this instance, the only portion cited by the Examiner is a portion from Bunce that teaches away from the inventions claimed in Claims 8, 19, and 24. Accordingly, one would not be motivated to combine Bunce with the German patent to arrive at the claimed invention. Therefore, the Examiner has failed to make out a *prima facie* case of obviousness against Claims 8, 19, and 24, since a person having ordinary skill in the art would not be motivated to combine the references. The Examiner is respectfully requested to withdraw the rejection of Claims 8, 19, and 24.

9. Applicants have affirmed election of the claim grouping that was earlier elected over the telephone. Applicants have cancelled the non-elected claims and added new claims to the elected group. Applicants have amended claims to overcome informalities. Applicants further request that the Examiner withdraw rejections for anticipation and obviousness, and advance the claims to allowance.

Respectfully submitted,

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